

## Abstract

The present invention relates to a device for determining the wheel geometry and/or the axle geometry of motor vehicles in an inspection room, using an optical measuring apparatus having at least one image-taking device which records a marking device including at least

5 one body feature and one reference feature system, and having an evaluating device, the position of the reference features in the inspection room being known in the evaluating device, and the recording of the marking device taking place during travel of the motor vehicle. The image-taking device is connected to a wheel to be measured, at its wheel rim in pivot joint fashion, and follows the rotating motion of the wheel, the optical axis of the  
10 image-taking device always being aligned essentially perpendicular to the roadway plane and the axis of rotation of the pivot joint being aligned in all wheel positions essentially parallel to the roadway plane. The reference feature system is situated in the roadway plane in the field of view of the image-taking device, and the at least one body feature is always situated in the field of view of the image-taking device and follows the movement of the motor  
15 vehicle. The position of the axis of rotation and/or the plane of rotation of the wheel is able to be determined in the light of the position of a wheel feature that is to be ascertained.